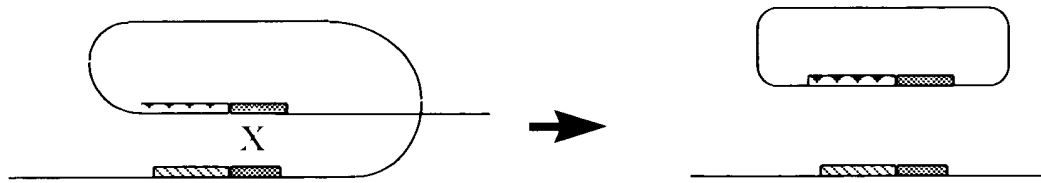


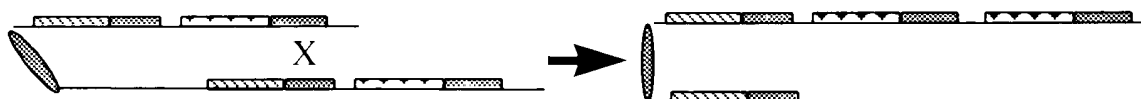
Figure 1. Three pathways for obtaining "deletion derivatives"



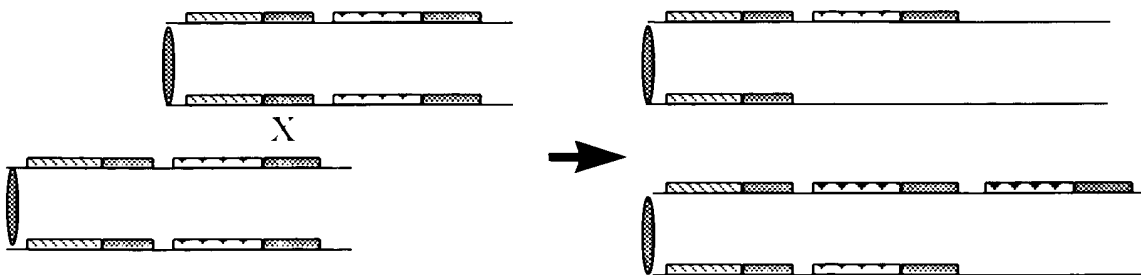
A. Loop-out



B. Unequal sister chromatid crossover



C. Unequal interhomologue crossover



**Figure 2. Gene conversion pathway (nonreciprocal recombination)
for obtaining “deletion derivatives”**

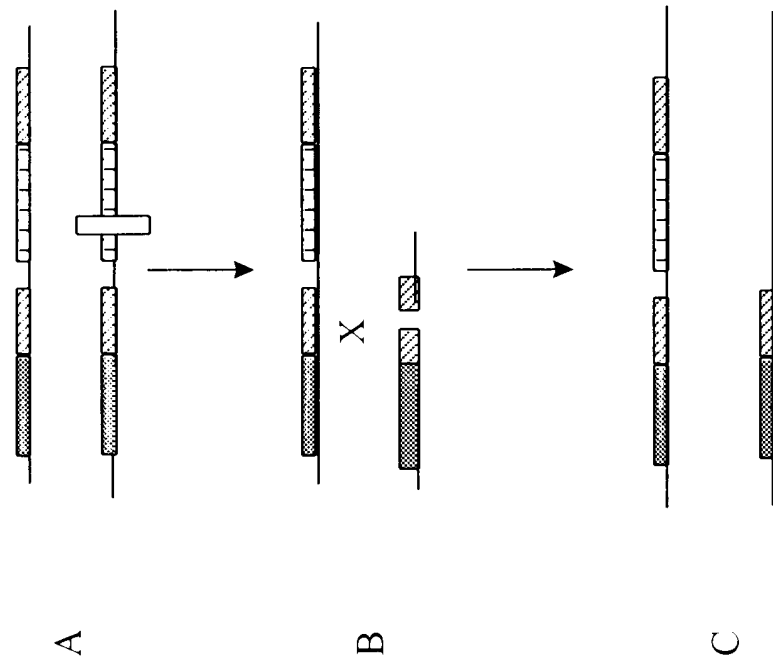
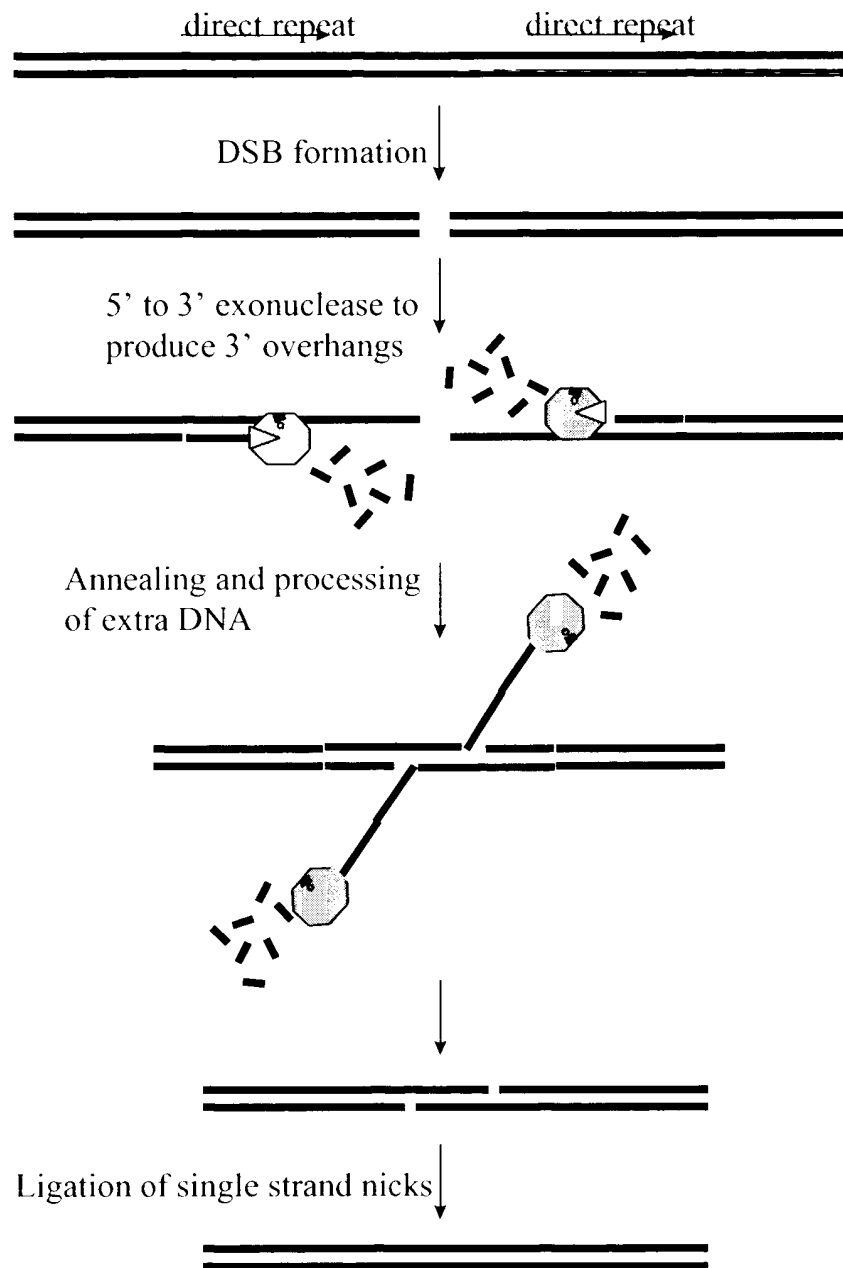


Figure 3. Single strand annealing model



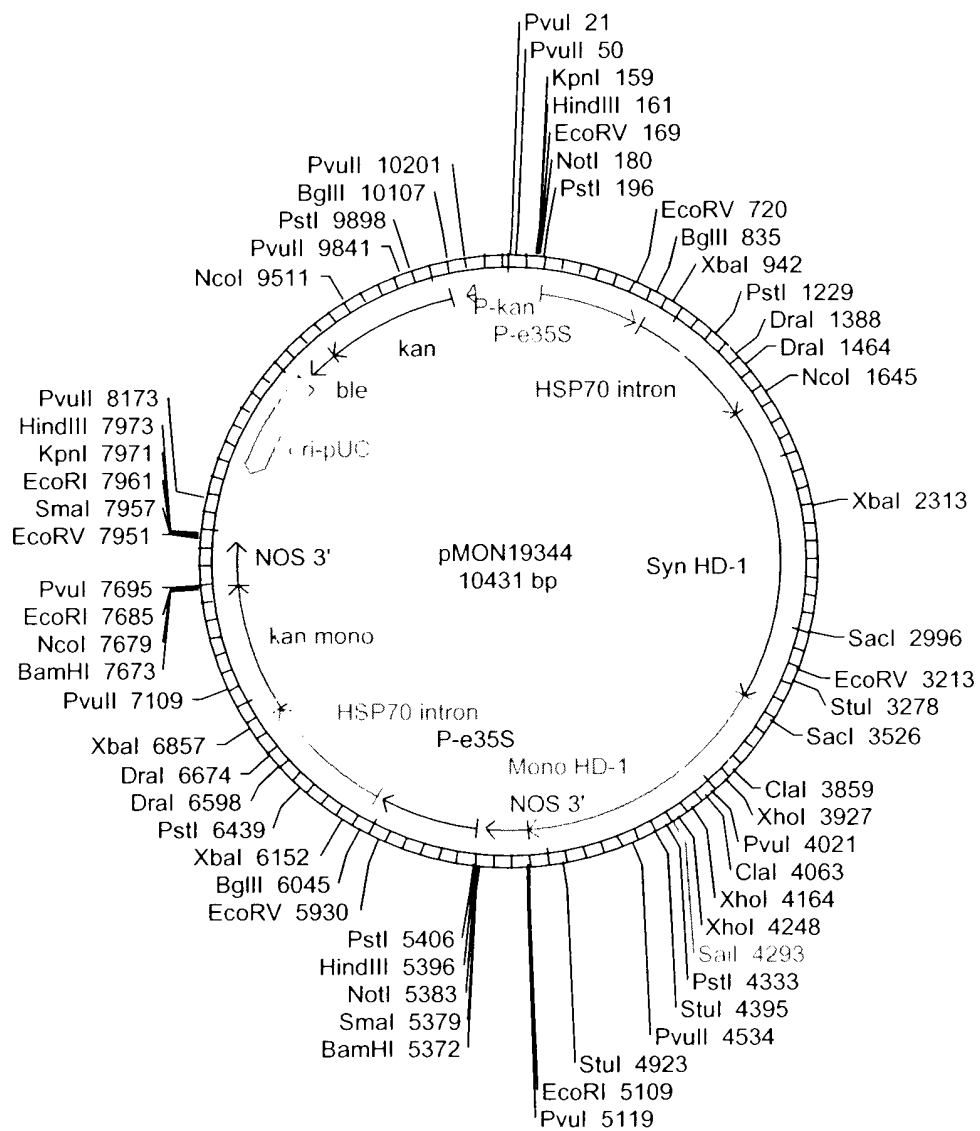
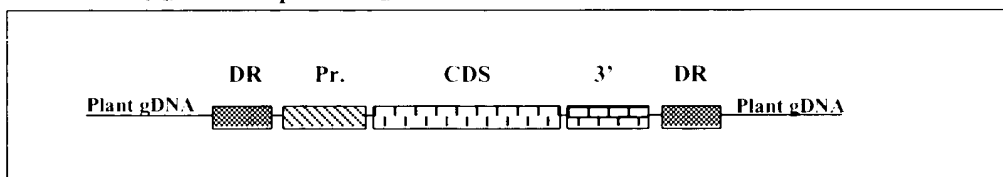


Figure 4.

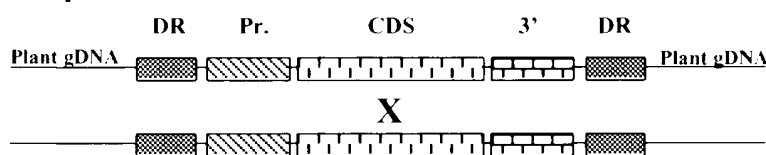
Direct Repeat Induced, Non-Reciprocal Recombination-Mediated Transgene Deletion

I. Hemizygous R_1 Transgenic Plant

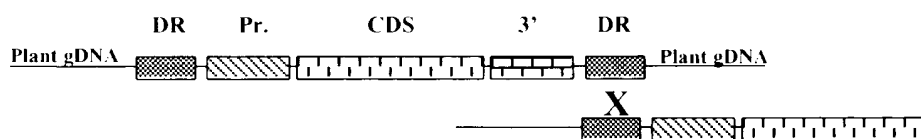


II. Homozygous S_1 Transgenic Plant at Meiosis

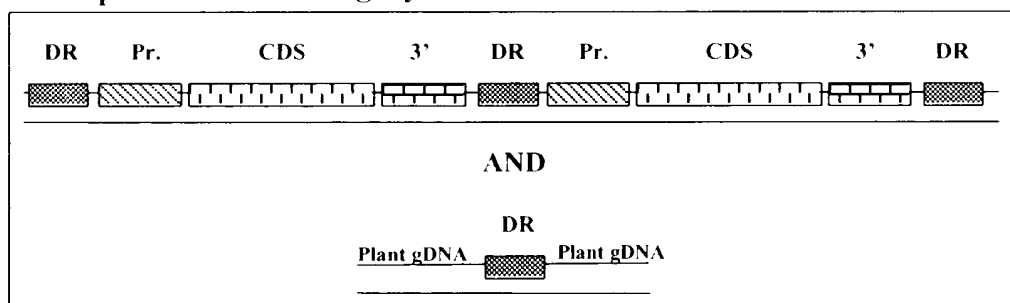
A. Reciprocal Recombination



B. Non-Reciprocal Recombination



III. F_1 Recombinant Progeny Plants



In the graphic illustration:

Plant gDNA	=	plant genomic DNA flanking the site of transgene integration
DR	=	Direct Repeat
Pr.	=	"Promoter"
CDS	=	coding sequence
3'	=	transcription terminator

Figure 5.

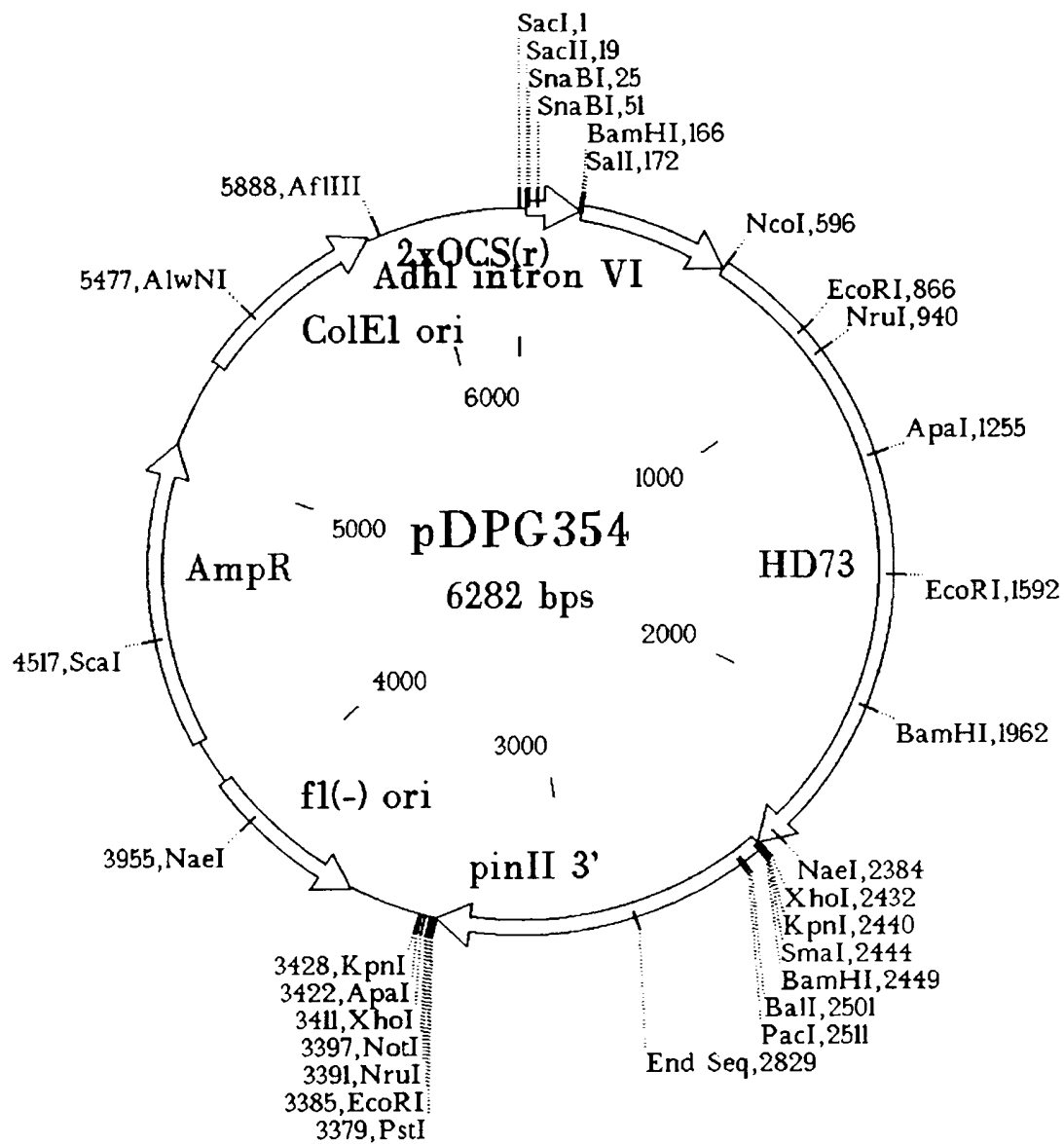


Figure 6.

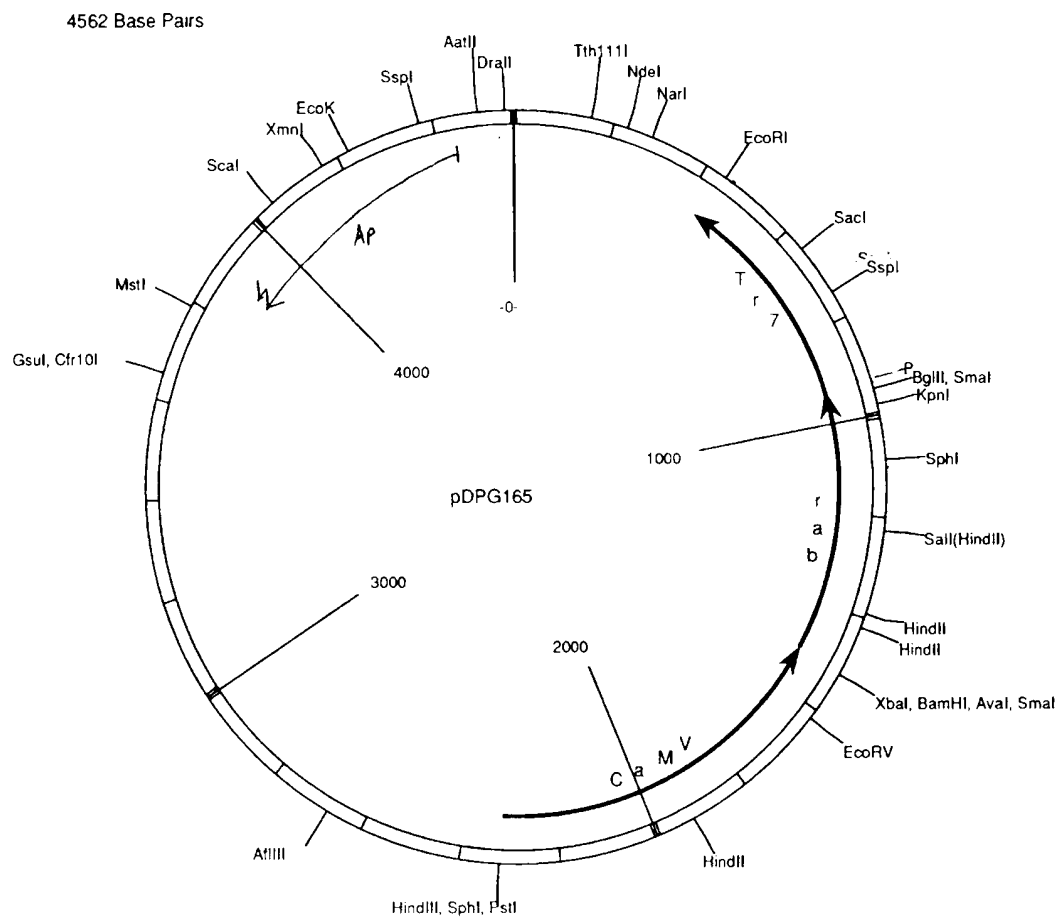


Figure 7.

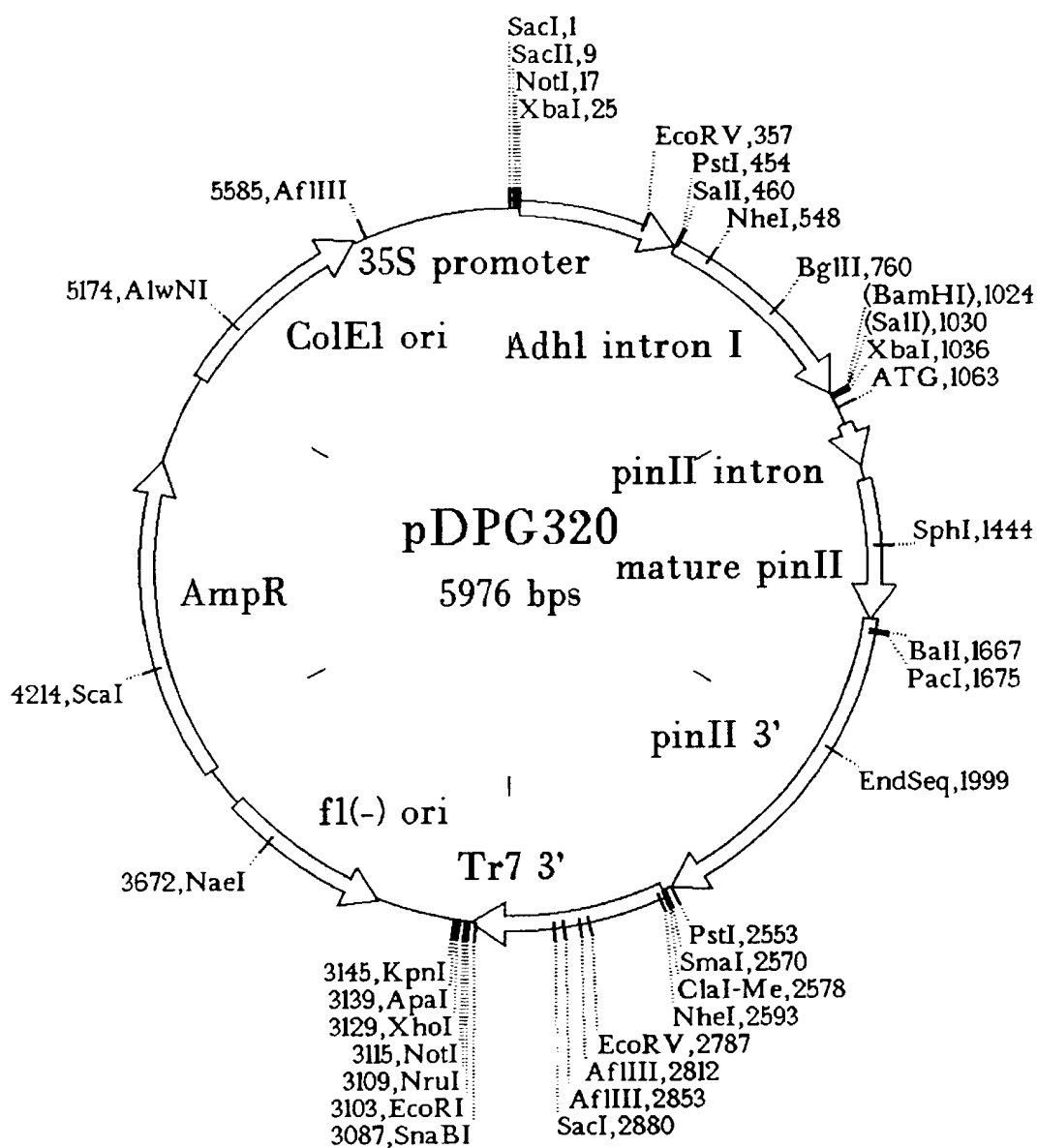


Figure 8.

DBT418 Transgene Insertion

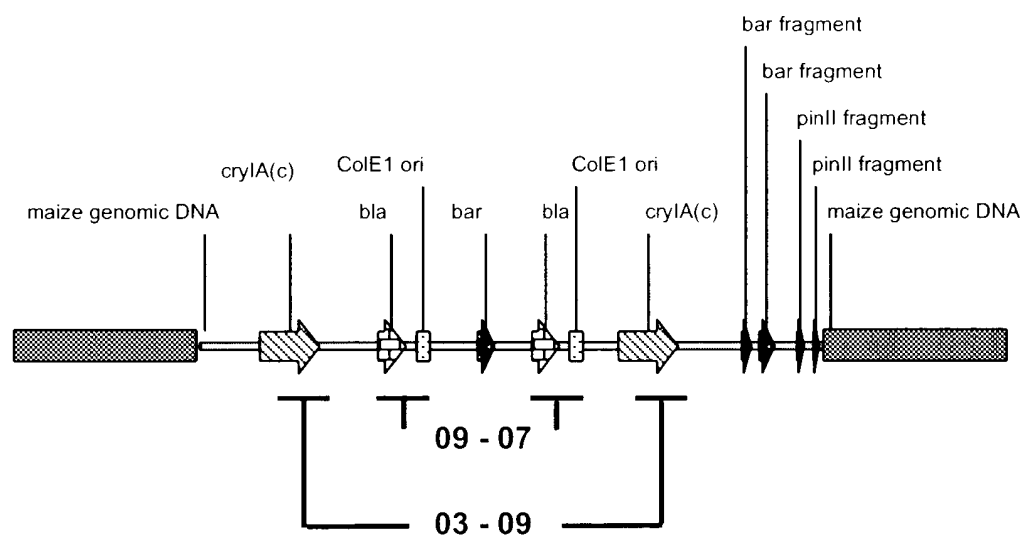
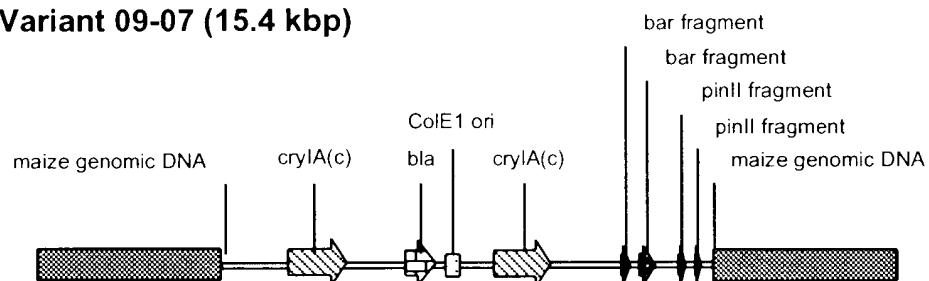


Figure 9.

DBT418 Altered Transgene Insertions

Variant 09-07 (15.4 kbp)



Variant 03-09 (9.2 kbp)

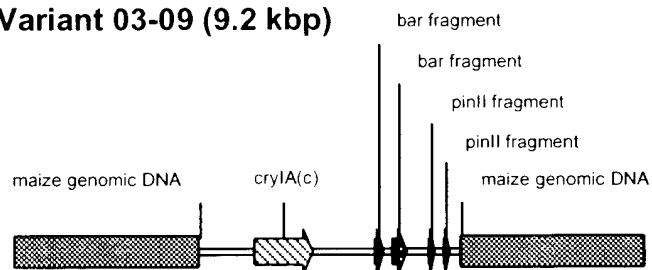
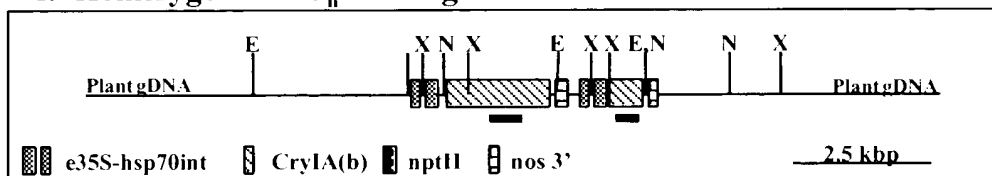


Figure 10.

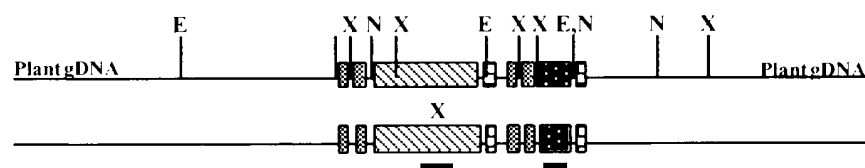
Non-Reciprocal Recombination-Mediated Transgene Deletion in MON849

I. Hemizygous BC_n Transgenic Plant



II. Homozygous S₁ Transgenic Plant at Meiosis

A. Reciprocal Recombination



B. Non-Reciprocal Recombination

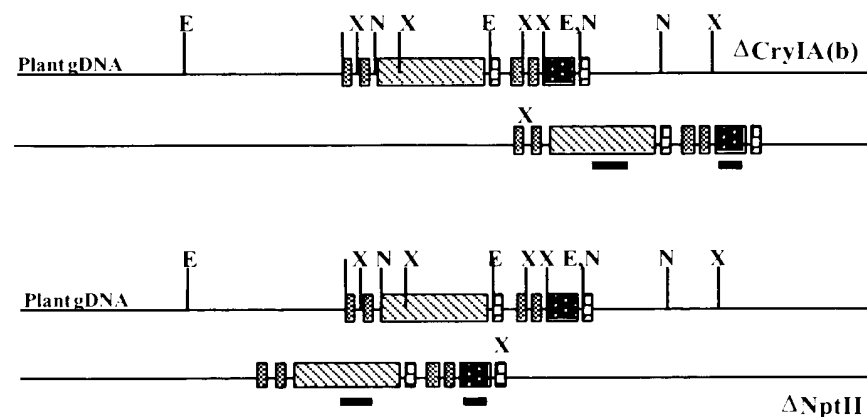
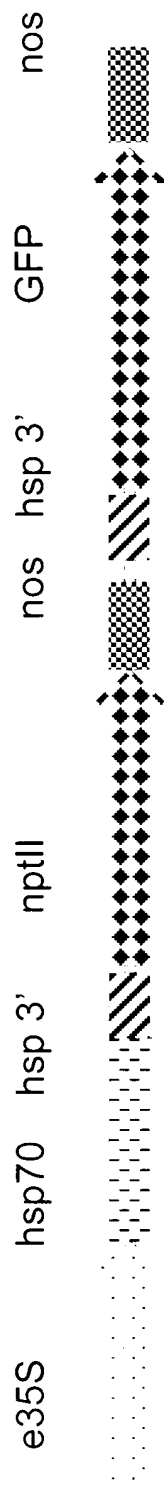
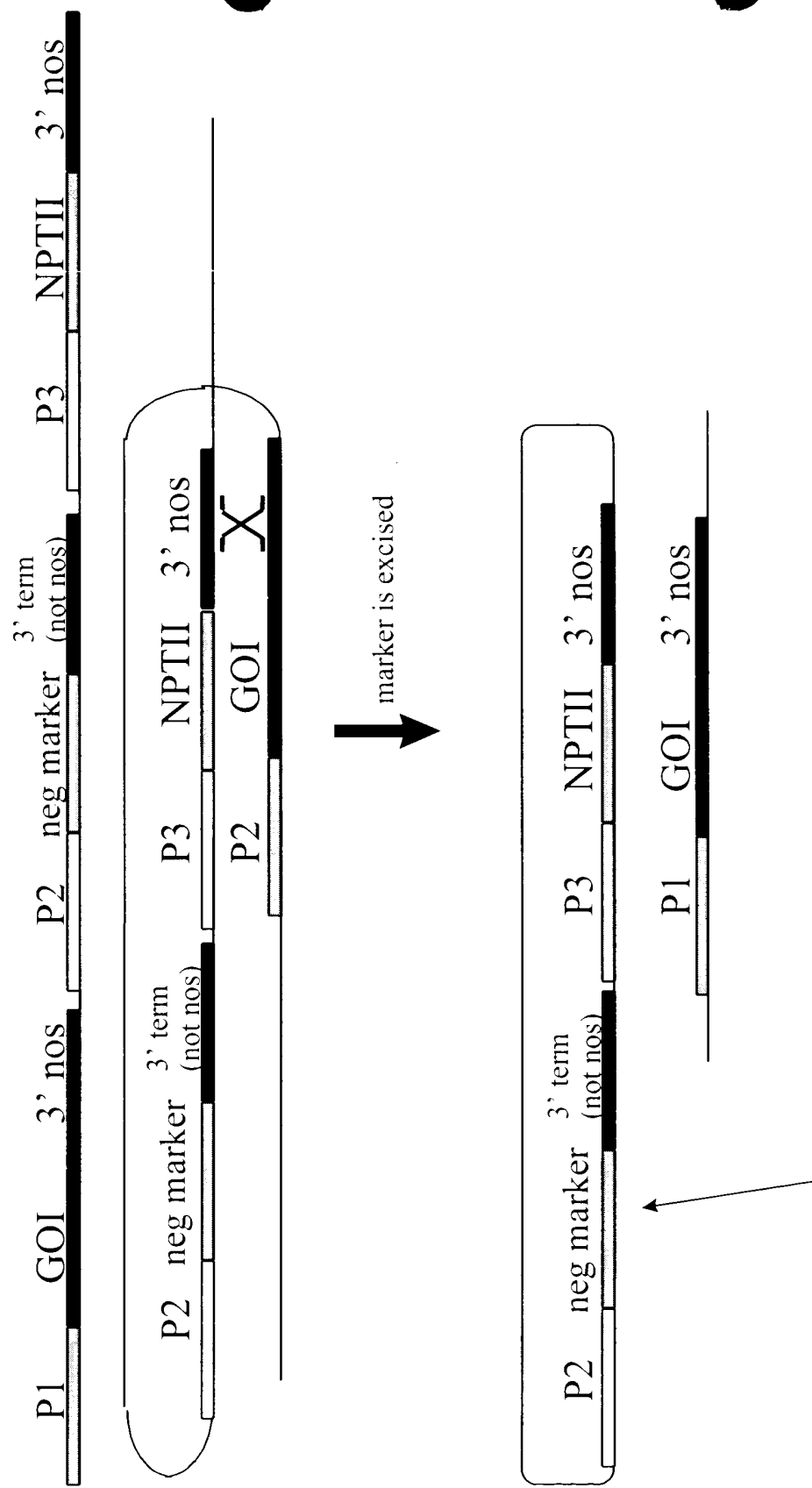


Figure 11.



pMON36133

Figure 12.



select for loss of negative selectable marker

Figure 13